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EXAMINER	
KADING, JOSHUA A	
ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/753,218	ENGWER ET AL.	
	Examiner	Art Unit	
	Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,8-11,13-18,20 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,8-11,13,14,16-18,20 and 25* is/are rejected.

7)☒ Claim(s) *15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 17, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,535,493 B1, Lee et al. (Lee).

Regarding claim 17, Lee discloses "a wireless network system, comprising: a wired backbone network comprising first and second sub-networks coupled together by way of a network device (*figure 1, where each AP 104 and 132 represent a separate sub-net of each LANs 110 and 120, each are connected by network devices 114 and 144*); a first access point on said first sub-network (*figure 1, element 104*); and a second access point on said second sub-network (*figure 1, element 132*), comprising a logic circuit for transmitting a message to one or more wireless units (*figure 1 where each AP is capable of transmitting to the wireless units 100 and 130*), said message includes information from which a wireless unit can determine if a current network protocol address assigned to said wireless unit is valid for said second sub-network (*col. 8, lines 21-40 where the message sent by the AP is used by the mobile to determine if the*

current associated address is valid for the sub-network serviced by the AP), said information includes a network protocol address for said second access point and a subnet mask of said second sub-network (*col. 5, line 53 indicates an address of the access point and col. 8, lines 21-28*)."

Regarding claim 18, Lee discloses "the wireless network system of claim 17, wherein said information further comprises a Media Access Control (MAC) address of said second access point (*col. 5, line 53*)."

Regarding claim 20, Lee discloses "the wireless network system of claim 17, wherein said message further includes information which said one or more wireless units can make roaming decision based on (*col. 8, lines 21-40*)."

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of U.S. Patent 5,724,346, Kobayashi et al. (Kobayashi).

Regarding claim 1, Lee discloses "in a wireless network system comprising first and second sub-networks having respective first arid second access points, and a wireless unit associated with first access point and having a current network protocol address valid for said first sub-network (*figure 1*), a method for said wireless unit to obtain a new network protocol address valid for said second sub-network, comprising: receiving a message having information by said wireless unit, said information including a network protocol address of said second access point (*col. 8, lines 21-40 and col. 5, line 53 indicates an address of the access point*), from which said wireless unit can determine if said current network protocol address is valid for said second sub-network (*col. 8, lines 21-40 where the message sent by the AP is used by the mobile to determine if the current associated address is valid for the sub-network serviced by the AP*); determining by said wireless unit that said current network protocol address is not valid for said second sub-network from said information by...(ii) determining that said current network protocol address is not valid for said second sub-network if said wireless unit has not previously stored said network protocol address (*col. 8, lines 21-40 whereby having to register with a new AP, the mobile unit has determined that the address has not been previously stored*); associating with said second access point by said wireless unit for communicating with said second sub-network (*col. 8, lines 32-35*); sending a request for said new network protocol address by said wireless unit to said second sub-network via said second access point (*figure 3, element 312*); and receiving said new network protocol address by said wireless unit from said second sub-network via said second access point (*col. 8, lines 64-col. 9, lines 1-8*)."

However, Lee lacks what Kobayashi discloses, "...(i) determining that said current network protocol address is not valid for said second sub-network based on information associated with said previously stored network protocol address (*col. 12, lines 16-21 where the management table located in the mobile unit stores status indicators associated with APs, which include "connection impossible" or an indication the address is invalid*)..."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the determining validity of an address based on previously stored information for the purpose of attempting connections with valid APs. The motivation for doing this is to attempt to connect to the best possible AP, this will give the best possible connection (*Kobayashi, col. 13, lines 25-30*).

Regarding claim 3, Lee and Kobayashi disclose the system of claim 1. However, Kobayashi lacks what Lee further discloses, "wherein said information comprises a subnet mask pertaining to said second sub-network (*col. 8, lines 21-28*)." It would have been obvious to one with ordinary skill in the art to include the subnet mask for the same reasons and motivation as in claim 1.

Regarding claim 4, both Lee and Kobayashi further disclose "said wireless unit sending a request to release said current network protocol address to said first sub-network (*Lee, figure 2, element 312; Kobayashi, figure 9, element 113*)."

5. Claims 8-10, 13, 14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of U.S. Patent 6,370,381 B1, Minnick et al. (Minnick).

Regarding claim 9, Lee discloses "a wireless unit for communicating with a wired backbone network having first and second sub-networks by way of respective first and second access points (*figure 1*), comprising: a wireless transceiver to communicate with said first and second access points via a wireless medium (*figure 2A, element 220*); a memory to communicate current network protocol address valid for said first sub-network (*figure 2A, element 202; col. 8, lines 21-26 where the first sub-network is defined by the home agent address stored in the mobile unit's memory*); and a logic circuit to receive a message from said second access point by way of said wireless receiver (*figure 2A, element 200*), said message includes information...from which said logic circuit can determine if said current network protocol address is valid for said second sub-network (*col. 8, lines 21-40 where the message sent by the AP is used by the mobile to determine if the current associated address is valid for the sub-network serviced by the AP*), said logic circuit is adapted to transmit a request for a new network protocol address valid for said second sub-network if said logic circuit either determines that said current network protocol address is not valid for said second sub-network or determines if said new network protocol address has been previously stored in said memory (*col. 8, lines 41-53 whereby determining by the mobile, if the an advertisement has been received is equivalent to determining if the address has been previously*

stored because they both alert the mobile to the fact that the AP has already been identified and there is no need for a further request of identity)."

However, Lee lacks what Minnick discloses, said information "comprises a subnet mask (*col. 15, lines 29-38*)."

It would have been obvious to one of ordinary skill in the art to include a subnet mask in the information message for the purpose of determining what subnet the wireless unit is currently registered in (*Lee, col. 8, lines 26-28*). The motivation for doing this is that this allows the wireless unit to roam and still communicate through tunneling and the like.

Regarding claim 8, Minnick and Lee disclose the wireless unit of claim 9. However, Minnick lacks what Lee further discloses "wherein said information comprises a network protocol address of said second access point (*col. 8, lines 45-47 where col. 5, line 53 indicates an address of the access point*)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the network protocol address for the same reasons and motivation as in claim 9.

Regarding claim 13, Lee discloses "an access point, comprising a logic circuit for periodically transmitting a message to a wireless unit without any predetermination by the access point that the wireless unit has moved from a first sub-network to a second sub-network (*col. 8, lines 33-40 where the wireless unit is in charge of notifying the AP's when it has moved, therefore, the AP's will not determine if the wireless mobile is in*

their domain or not), said message comprising information including a network protocol address...identifying that the access point is coupled to said second sub-network, said information being used by the wireless unit to determine if a current network protocol address of the access point is valid on said second sub-network (*col. 8, lines 21-40 where the message sent by the AP is used by the mobile to determine if the current associated address is valid for the sub-network serviced by the AP*)."

However, Lee lacks what Minnick discloses, said information "comprises a subnet mask (*col. 15, lines 29-38*)."

It would have been obvious to one of ordinary skill in the art to include a subnet mask in the information message for the purpose of determining what subnet the wireless unit is currently registered in (*Lee, col. 8, lines 26-28*). The motivation for doing this is that this allows the wireless unit to roam and still communicate through tunneling and the like.

Regarding claims 10 and 14, Minnick and Lee disclose the wireless unit of claims 8 and 13. However, Minnick lacks what Lee further discloses, "wherein said message causes the wireless unit to release the current network protocol address and obtain a new network protocol address for the second sub-network (*figure 3, element 312*)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the request to release for the same reasons and motivation as in claims 8 and 13.

Regarding claim 25, Lee and Minnick both disclose, "wherein said message comprises a header and a payload including said information (*Lee, col. 5, lines 35-60 whereby encapsulating IP within IP means the newly formed packet contains a payload and header; Minnick, col. 8, table 3 shows a table with various addresses and the corresponding data with those addresses*)."

6. Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. and Minnick et al. as applied to claims 8 and 13 above, and further in view of Kobayashi et al.

Regarding claim 11, Lee and Minnick lack what Kobayashi discloses, "wherein said logic circuit is capable of determining if said new network protocol address has been previously stored in said memory, and determining whether said now network protocol address is valid based on information stored in said memory that is associated with said previously stored new network protocol address (*col. 12, lines 16-21 where the management table located in the mobile unit stores status indicators associated with APs, which include "connection impossible" or an indication the address is invalid*)..." It would have been obvious to one with ordinary skill in the art at the time of invention to include the determining the validity of an address based on previously stored information for the purpose of attempting connections with valid APs. The motivation for doing this is to attempt to connect to the best possible AP, this will give the best possible connection (*Kobayashi, col. 13, lines 25-30*).

Regarding claim 16, Lee and Minnick lack what Kobayashi discloses, "wherein said logic circuit determines that said current network protocol address of the access point is invalid on said second sub-network if said logic circuit does not locate said new network protocol address within internal memory of said logic circuit (*col. 12, lines 16-21 where the management table stores connectable access points, thus if the new network protocol address is not listed in the table, it is not a connectable access point is thus invalid*)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the determining the validity of an address based on previously stored information for the purpose of attempting connections with valid APs. The motivation for doing this is to attempt to connect to the best possible AP, this will give the best possible connection (*Kobayashi, col. 13, lines 25-30*).

Allowable Subject Matter

7. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a subnet mask) are not recited in rejected claim 17. Although the claims are

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant's arguments filed 9 February 2005 have been fully considered but they are not persuasive.

Applicant argues for claims 9 and 17 that Lee does not disclose, "if the logic determines the current network protocol address is not valid for the second sub-network..." It is further argued that because Lee uses tunneling, this teaches away from applicant's invention and therefore is impermissible. The examiner respectfully disagrees.

Lee discloses a situation where a wireless unit has the ability to roam and once it has detected that it is roaming (through the use of network protocol addresses as described in the cited portions) the mobile acquires a roaming address through registration with the foreign agent. Therefore, the logic has determined that the current network protocol address is no longer valid in the foreign domain and requires a new one.

Regarding the issue of tunneling in Lee: there is no requirement in applicant's claimed invention stating that tunneling is impermissible. Further, applicant only states that the wireless unit requests and receives a new wireless address. This, broadly interpreted, includes receiving a new tunneling wireless address. That is to say, there is no requirement that the wireless unit relinquish the old network address.

Applicant argues that the connection table in Kobayashi does not read on the claimed limitations because the "connection impossible" status can include the situation where the AP is down but not the situation where the AP is on a different network. The examiner respectfully disagrees.

As noted in the cited portion of Kobayashi, the table is used to identify the status of varying AP's in a sub-network. One status indicator, "connection impossible," is used to indicate that the AP with this status is not capable of making connections. That is to say, the AP is not connectable. Applicant's arguments describe a situation where the AP is not present in the sub-network and that is what is meant by not connectable. There is no such definition in the claim requiring this given limitation. As written, the "not valid" limitation can broadly mean not connectable because of a "connection impossible" status. Since the AP has a status of "connection impossible" it is not valid.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua Kading
Examiner
Art Unit 2661

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

June 16, 2005